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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,217	04/28/2005	Shinsuke Suzuki	3400.P1420US	1388
23474 7590 09/11/2007 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			EXAMINER THERKORN, ERNEST G	
			ART UNIT 1723	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,217	Applicant(s) SUZUKI ET AL.	
	Examiner Ernest G. Therkorn	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 13, and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 13, and 15 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Francotte (WO 97/04011). The claims are considered to read on Francotte (WO 97/04011). However, if a difference exists between the claims and Francotte (WO 97/04011), it would reside in optimizing the elements of Francotte (WO 97/04011). It would have been obvious to optimize the elements of Francotte (WO 97/04011) to enhance separation.

Claims 1, 3-5, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francotte (WO 97/04011) in view of Voute (WO 99/51316). At best, the claims differ from Francotte (WO 97/04011) in reciting use of gamma radiation. Voute (WO 99/51316) (page 10, line 29-page 11, line 8 and page 14, lines 1-6)

discloses that gamma radiation may be used to crosslink polysaccharide derivatives. It would have been obvious to use gamma radiation in Francotte (WO 97/04011) because Voute (WO 99/51316) (page 10, line 29-page 11, line 8 and page 14, lines 1-6) discloses that gamma radiation may be used to crosslink polysaccharide derivatives.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Francotte (WO 97/04011) or Francotte (WO 97/04011) in view of Voute (WO 99/51316) as applied to claims 1, 3-5, 13, and 15 above, and further in view of either Ohnishi (U.S. Patent No. 6,736,967) or Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288. At best, the claim differs from either Francotte (WO 97/04011) or Francotte (WO 97/04011) in view of Voute (WO 99/51316) in reciting use of silica gel. Ohnishi (U.S. Patent No. 6,736,967) (column 4, lines 22-26) discloses that silica gel is a particularly preferable carrier. Paragraph 15 of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 discloses that silica gel is an ideal carrier. It would have been obvious to use silica gel in either Francotte (WO 97/04011) or Francotte (WO 97/04011) in view of Voute (WO 99/51316) either because Ohnishi (U.S. Patent No. 6,736,967) (column 4, lines 22-26) discloses that silica gel is a particularly preferable carrier or because paragraph 15 of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 discloses that silica gel is an ideal carrier.

Claims 1, 3-5, 13, and 15 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288. PTO Translation No 04-4002 of Japan Patent No. 2001-296288 will serve as a

translation of Japan Patent No. 2001-296288. The claims are considered to read on Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288. However, if a difference exists between the claims and Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288, it would reside in optimizing the elements of Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288. It would have been obvious to optimize the elements of Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 to enhance separation.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 in view of Francotte (WO 97/04011). At best, the claim differs from Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 in the clarity of reciting the compound contains no polymerizable unsaturated groups. Francotte (WO 97/04011) (the sentence bridging pages 2 and 3) discloses that it is of special importance to have no polymerizable double bonds prior to crosslinking. It would have been obvious to have no polymerizable unsaturated groups in Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 because Francotte (WO 97/04011) (the sentence bridging pages 2 and 3) discloses that it is of special importance to have no polymerizable double bonds prior to crosslinking.

Claims 1, 3-5, 13, and 15 are rejected under 35 U.S.C. 102(E) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ohnishi (U.S. Patent No.

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6,736,967). The claims are considered to read on Ohnishi (U.S. Patent No. 6,736,967). However, if a difference exists between the claims and Ohnishi (U.S. Patent No. 6,736,967), it would reside in optimizing the elements of Ohnishi (U.S. Patent No. 6,736,967). It would have been obvious to optimize the elements of Ohnishi (U.S. Patent No. 6,736,967) to enhance separation.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnishi (U.S. Patent No. 6,736,967) in view of Francotte (WO 97/04011). At best, the claim differs from Ohnishi (U.S. Patent No. 6,736,967) in the clarity of reciting the compound contains no polymerizable unsaturated groups. Francotte (WO 97/04011) (the sentence bridging pages 2 and 3) discloses that it is of special importance to have no polymerizable double bonds prior to crosslinking. It would have been obvious to have no polymerizable unsaturated groups in Ohnishi (U.S. Patent No. 6,736,967) because Francotte (WO 97/04011) (the sentence bridging pages 2 and 3) discloses that it is of special importance to have no polymerizable double bonds prior to crosslinking.

Claim 14 has been withdrawn from consideration as being drawn to a non-elected species.

The remarks urge patentability over each of Francotte (WO 97/04011), Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288, and Ohnishi (U.S. Patent No. 6,736,967) based upon method of making limitations. However, as stated in *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972):

"We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a

product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable."

As such, the rejection under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Francotte (WO 97/04011), Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288, and Ohnishi (U.S. Patent No. 6,736,967) is considered to be appropriate.

The remarks urge that Francotte (WO 97/04011) does not use gamma radiation. However, Francotte (WO 97/04011) in the fourth full paragraph of page 5 discloses that he uses "radiation energy of various wavelengths." In any event, Voute (WO 99/51316) (page 10, line 29-page 11, line 8 and page 14, lines 1-6) discloses that gamma radiation may be used to crosslink polysaccharide derivatives. It would have been obvious to use gamma radiation in Francotte (WO 97/04011) because Voute (WO 99/51316) (page 10, line 29-page 11, line 8 and page 14, lines 1-6) discloses that gamma radiation may be used to crosslink polysaccharide derivatives.

The remarks urge that Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 and Ohnishi (U.S. Patent No. 6,736,967) do not use gamma rays to bind the polysaccharide to the support. However, paragraph 14 of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 and column 4, lines 35-51 disclose binding the polysaccharide to the support with gamma rays.

The remarks urge that the submitted table shows unexpected results. With regard to Japan Patent No. 2001-296288 in view of PTO Translation No 04-4002 of Japan Patent No. 2001-296288 and Ohnishi (U.S. Patent No. 6,736,967), unexpected

results can not be shown when there is no difference. In any event, Example 6 and comparative example 3 of the Table of August 13, 2007 would appear to be substantially the same. Racemic Modification 1 of Example 4 and Comparative example 2 would appear to be substantially the same. Moreover, the claims are not of commensurate scope with the showing. The showing would appear to be limited to gamma rays and no claim is limited to gamma rays. In addition, the showing would appear to be limited to optical isomers. The showing has been made with respect to only two compounds. Lastly, the presence or absence of gamma rays would not appear to be the only difference in procedure of making the product of the example of the instant specification and Francotte (WO 97/04011).

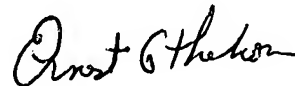
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT
September 7, 2007